

CLAIMS

1. A method of forming a filter unit comprised of a filter element and an encircling peripheral encasement frame to which the filter element is sealed wherein the frame is moulded *in situ* by solidification of a liquid, solidifiable moulding composition provided around the periphery of the filter element.
2. A method as claimed in claim 1 wherein the frame is moulded so as partially to overlie a marginal region of at least one of the faces of the filter element.
3. A method as claimed in claim 1 or 2 comprising the steps of:
 - (i) providing a filter element having front and rear faces and a bounding peripheral edge,
 - (ii) locating around the peripheral edge of the element a mould unit which seals against peripheral regions of the front and rear faces and which together with the peripheral edge defines a mould cavity,
 - (iii) filling the mould cavity with a solidifiable, liquid moulding composition,
 - (iv) effecting conversion of the liquid to a solid, and
 - (v) removing the mould thereby producing the filter element.
4. A method as claimed in any one of claims 1 to 3 wherein the solidifiable, liquid moulding composition is a curable resin system.
5. A method as claimed in any one of claims 1 to 3 wherein the solidifiable, liquid moulding composition is a molten thermoplastic resin that solidifies on cooling.

6. A method as claimed in any one of claims 1 to 5 wherein the filter element is pleated.
7. A method as claimed in any one of claims 1 to 6 wherein the filter element is a H.E.P.A. filter element.
8. A method as claimed in any one of claims 1 to 6 wherein the filter element comprises U.L.P.A. (Ultra Low Penetration Air) media, ASHRAE media or a ePTFE laminate.
9. A method as claimed in any one of claims 1 to 5 wherein the filter element comprises a foam, pad or activated carbon.
10. A filter unit comprised of a filter element and a peripheral encasement frame sealed to the element wherein the frame has been moulded *in situ* around the filter element.
11. A filter unit as claimed in claim 7 wherein the filter unit is a H.E.P.A. filter unit.
12. A method for producing a filter unit substantially as hereinbefore described with reference to Figs. 2 and 3 of the accompanying drawings.
13. A filter unit substantially as hereinbefore described with reference to Fig. 3 of the accompanying drawings.

6. A method as claimed in any one of claims 1 to 5 wherein the filter element is pleated.
7. A method as claimed in any one of claims 1 to 6 wherein the filter element is a H.E.P.A. filter element.
8. A method as claimed in any one of claims 1 to 6 wherein the filter element comprises U.L.P.A. (Ultra Low Penetration Air) media, ASHRAE media or a ePTFE laminate.
9. A method as claimed in any one of claims 1 to 5 wherein the filter element comprises a foam, pad or activated carbon.
10. A filter unit comprised of a filter element and a peripheral encasement frame sealed to the element wherein the frame has been moulded *in situ* around the filter element.
11. A filter unit as claimed in claim 7 wherein the filter unit is a H.E.P.A. filter unit.
12. A method for producing a filter unit substantially as hereinbefore described with reference to Figs. 2 and 3 of the accompanying drawings.
13. A filter unit substantially as hereinbefore described with reference to Fig. 3 of the accompanying drawings.